

# ***Traffic Calming***

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*72<sup>nd</sup> Street*

*- Commonwealth Ave. to Wolf Rd.*

*Chasemoor Drive*

*- Lincolnshire Dr. to 79<sup>th</sup> St.*

*Prepared by*

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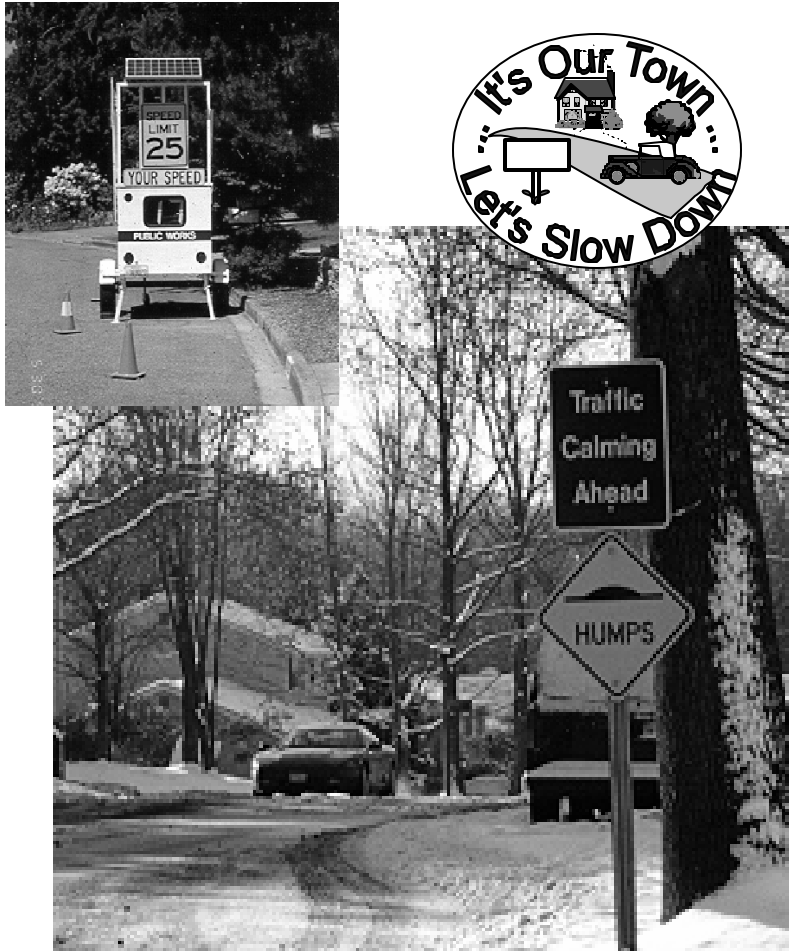
September 2003

# *Traffic Calming*

1. Introduction
2. Traffic Calming Measures
  - Volume Control
  - Speed Control
3. Traffic Calming Options
  - 72<sup>nd</sup> Street (Commonwealth – Wolf)
  - Chasemoor Drive (Lincolnshire – 79<sup>th</sup>)



# Introduction to Traffic Calming



Traffic Calming is one part of the 3 E's.

- **Engineering**

- Geometric Design
- Traffic Calming
  - Volume Control / Speed Control

- **Education**

- **Enforcement**

- Police

## DEFINITION OF TRAFFIC CALMING

Traffic calming is defined as changes in street alignment, installation of barriers, and/or other physical measures to reduce traffic speeds and/or traffic volumes in the interest of street safety, livability, and other public purposes.

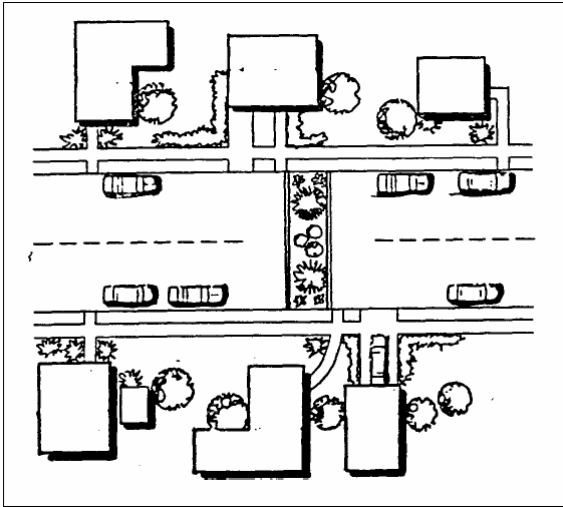
# Volume Control Options

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<u>Option</u>	<u>% of Volume Reduction</u>
(1) Full closures	44%
(2) Partial closures	42%
(3) One Lane Chokers	20%
*(4) Diverters	35%
*(5) Median barriers	30% +/-

# Full Closures (cul-de-sacs, dead ends, gates)

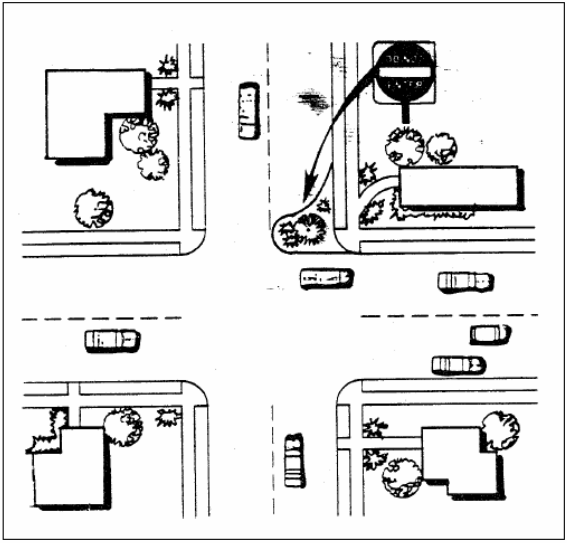
% Volume  
Reduction  
44%



# Partial Closures

(partial closures, one-way closures, directional closures)

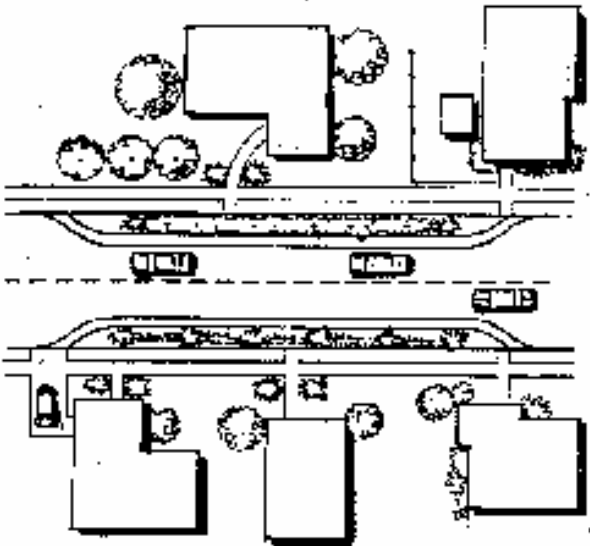
% Volume Reduction  
42%



# One Lane Chokers

(pinch points, midblock narrowings or yield points, constrictions or one lane slow points)

% Volume Reduction  
20%



Note: One lane choker  
also effective for  
speed control

# Speed Control Options

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## (1) Vertical

- speed humps, speed tables, raised intersections, textured pavements

## (2) Horizontal

- traffic circles, roundabouts, chicanes, lateral shifts, realigned intersections

## (3) Narrowing

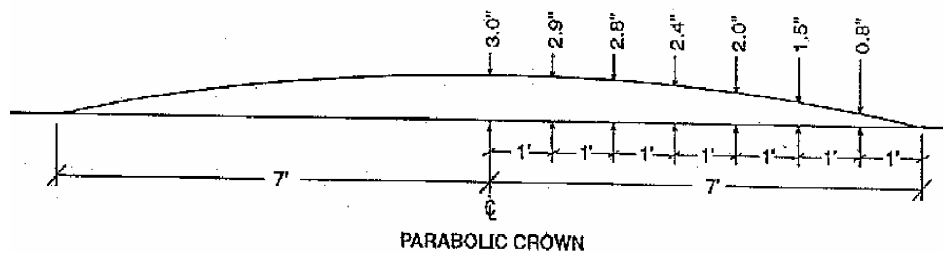
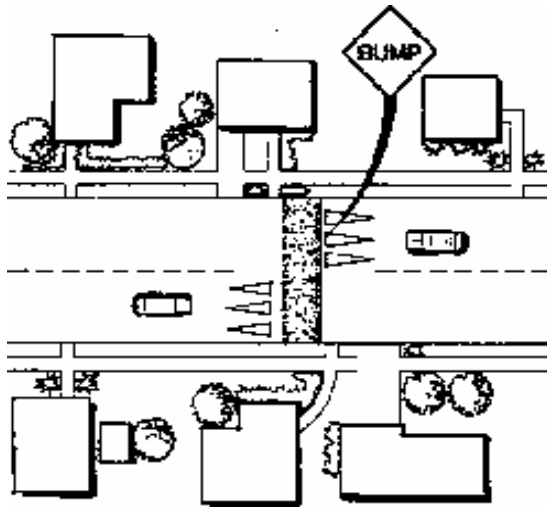
- center islands, chokers, neck downs, street narrowing



Vertical

# Speed Humps (undulations)

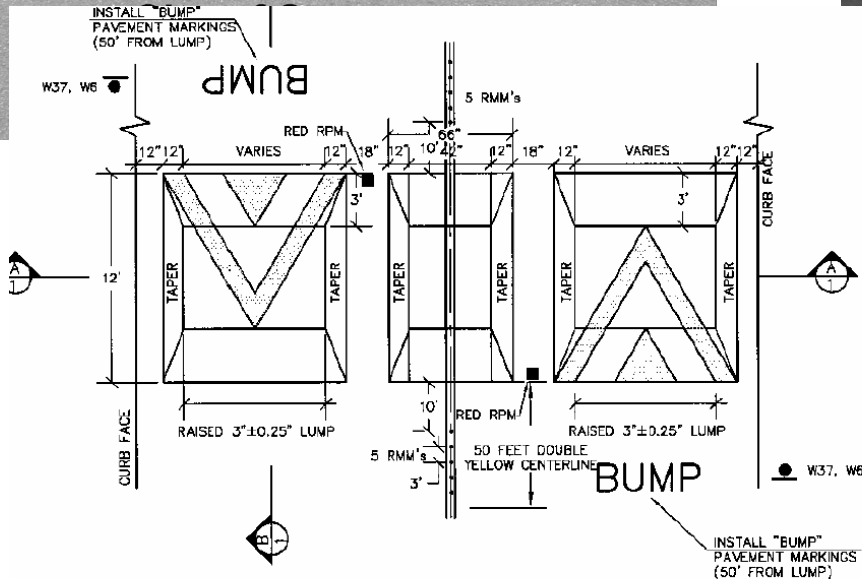
% Speed  
Reduction  
23%



Vertical

# Modified Speed Humps (speed lump, speed pillow)

% Speed  
Reduction  
23%



SPEED "LUMP" DETAIL A"

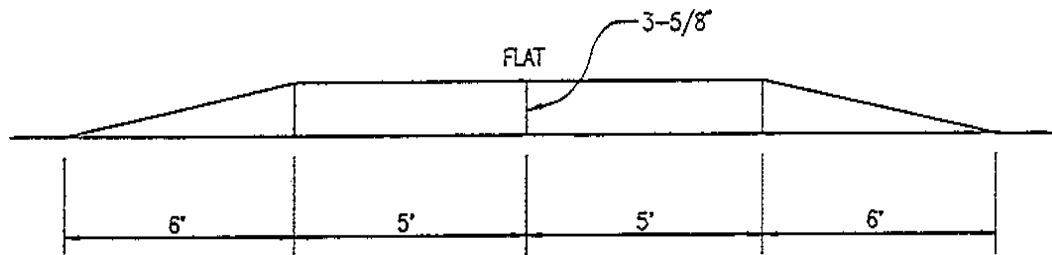
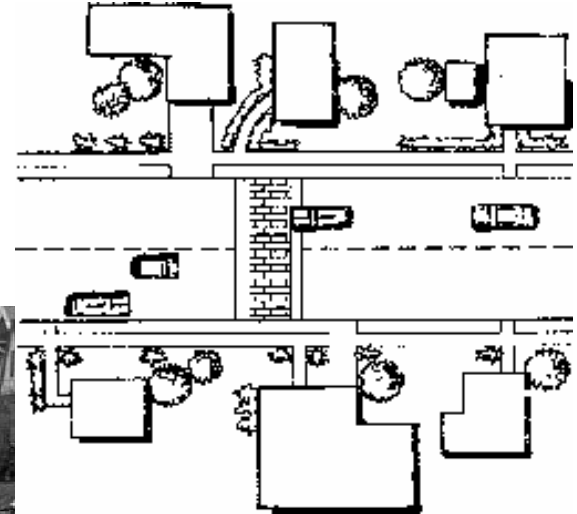


Vertical

# Speed Tables

(trapezoidal humps, flat topped humps)

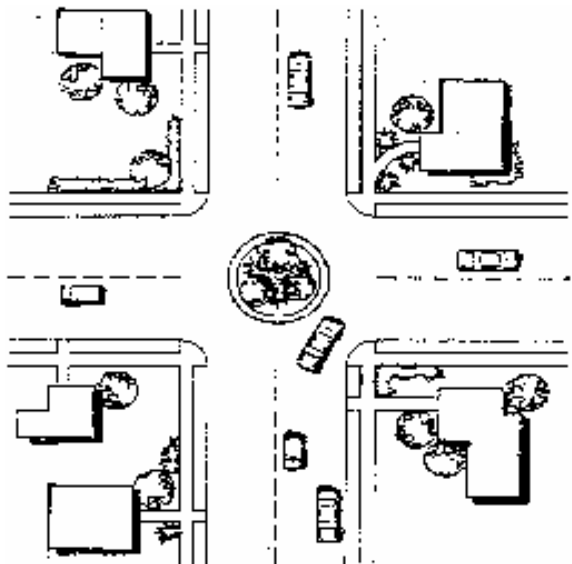
% Speed Reduction  
18%



Horizontal

# Traffic Circles (rotaries, intersection islands)

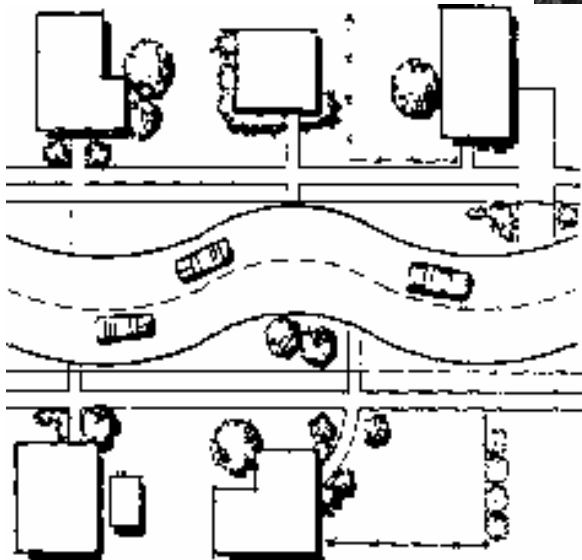
% Speed  
Reduction  
11%



Horizontal

# Chicanes (deviations, reversing curves)

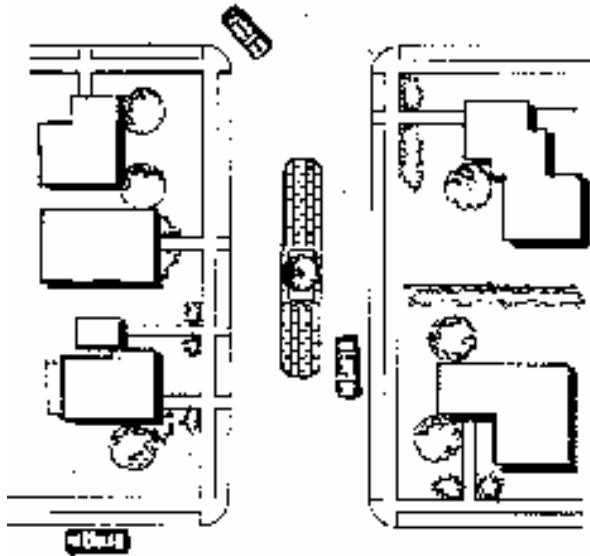
% Speed  
Reduction  
4%+?



# Center Island Narrowings

(midblock medians, pedestrian refuge, median slowpoints, median chokers)

% Speed  
Reduction  
4%



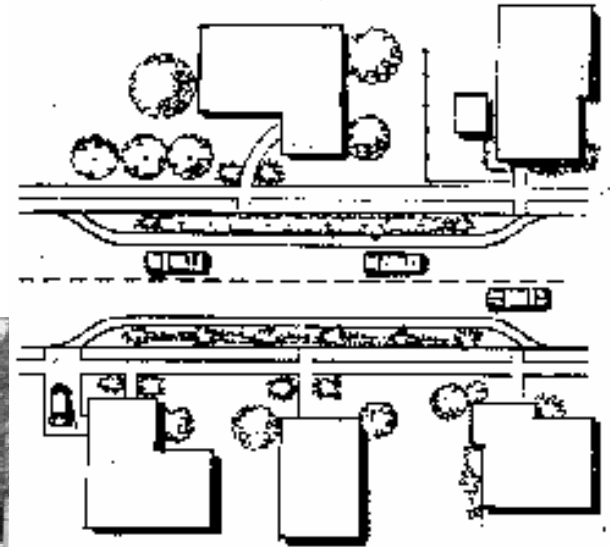


Narrowing

# Chokers

(pinch points, midblock narrowings, curb extensions, midblock yield points)

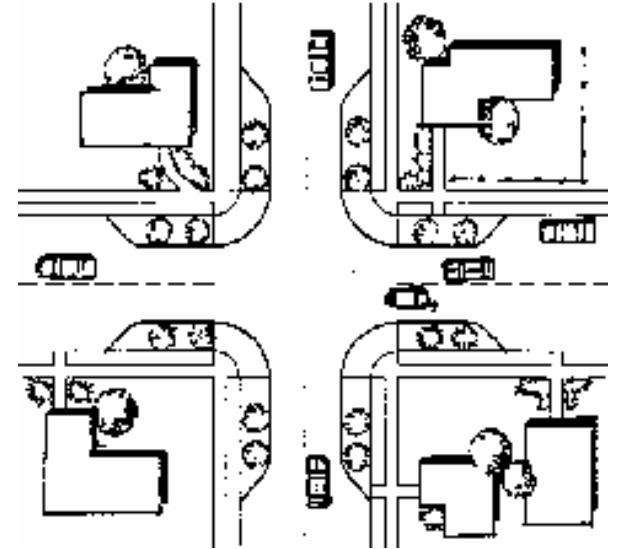
% Speed Reduction  
4-14%



Narrowing

# Neckdowns (nubs, bulbouts, knuckles, intersection narrowings, corner bulges)

% Speed  
Reduction  
4%





# Signage

## - Stop Signs

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- Stop signs assign right-of-way
- Installation warranted when:
  - High volumes require right-of-way assignment
  - Non-removable visibility restrictions exist
  - Past accident history identifies a problem where signage would be effective
- Multiple studies show they are not effective for speed control
  - Speed effective only within 200' of sign
  - Unwarranted stop signs often increase number of accidents
  - Become unenforceable when unwarranted



# Traffic Calming

## 72<sup>nd</sup> Street (Commonwealth – Wolf)



### Possible Options

- Traffic Circles
- Modified Speed Humps



# Traffic Calming Chasemoor Dr.

## Possible Options

- Traffic Circles
- Modified Speed Humps
- Center Islands



# Traffic Calming Resources

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## Websites

1. [www.trafficcalming.org](http://www.trafficcalming.org)
  - Fehr & Peers Transportation Consultants Site
  - drawn from *Traffic Calming: State of the Practice*, by Reid Ewing
2. [www.ite.org/traffic/](http://www.ite.org/traffic/)
  - Institute of Transportation Engineers Site
3. [www.fhwa.dot.gov/environment/tcalm/](http://www.fhwa.dot.gov/environment/tcalm/)
  - Federal Highway Administration Site